May 2, 2022 2000-770-01

Mr. Andrew Hass
U.S. Environmental Protection Agency
Region III
1650 Arch Street (3HS21)
Philadelphia, PA 19103-2029

RE: Monthly Progress Report for April 2022 Activities
Stanley Kessler Site, Upper Merion Township
Montgomery County, Pennsylvania

Dear Mr. Hass:

This monthly progress report is submitted in accordance with Section 34 of the Consent Decree for the above-referenced Site that was entered in the United States District Court for the Eastern District of Pennsylvania in the matter of United States v. PSD Queens Drive LP, et al., Civil Action No. 07-1137 on October 11, 2007 (the "Consent Decree"). This progress report describes the activities completed during April 2022 and the anticipated activities for May 2022. This report is organized into the major headings that correspond to the specific requirements listed as items (a) through (g) in Section 34 of the Consent Decree.

A. ACTIVITIES COMPLETED DURING APRIL 2022

- The April 2022 monthly Site visit was conducted on April 19, 2022.
- The April 2022 monthly system effluent sample collection occurred on April 19 2022.
- Depth to water measurements were collected from all Site wells on April 19, 2022.
- On April 19, 2022, Advanced GeoServices replaced the sediment bag filters.

B. RESULTS OF SAMPLING AND TESTS DURING MARCH 2022 AND APRIL 2022

- The March 2022 effluent sample results have been validated and are attached. There were no exceedances of the NPDES Permit Instantaneous Maximum Discharge Limit.
- The April 2022 monthly depth to water measurements and water elevations are attached.
- The Groundwater Treatment System Potentiometric Map for April 2022 is presented as Figure 1.
- The April 2022 effluent sample is being analyzed and the results will be submitted when validation is complete.
- The samples collected during the first Semi-Annual Groundwater Sampling Event for 2022 have been analyzed and the results are attached.
- The groundwater trichloroethene (TCE) concentrations for the semi-annual sampling events from September 2002 through March 2022 are shown on Figure 2.

- Graphs demonstrating potential trends for TCE, 1,1,1-trichloroethane (1,1,1-TCA), and 1,1 dichloroethene (1,1-DCE) over time have been attached.

C. COMPLETED PLANS AND DELIVERABLES IN APRIL 2022

- The monthly progress report for March 2022 was submitted on April 1, 2022.

D. PLANNED ACTIVITIES FOR MAY 2022

- The May 2022 site visit, the monthly depth to water measurements from site wells and the monthly effluent sampling are scheduled to be conducted during the week of May 9, 2022.

E. PERCENTAGE OF WORK COMPLETED

	Activity	Percent Completed
1.	Work Plan Preparation	100%
2.	Design Investigation Implementation	100%
3.	Combined Preliminary and Pre-Final Design	100%
4.	Final Design	100%
5.	Installation of the Remedy	100%

F. MODIFICATIONS TO THE WORK PLAN

- No modifications were made to the Work Plan during this reporting period.

G. COMMUNITY RELATIONS SUPPORT

- No community relations support was conducted during this reporting period.

If you have any questions concerning the activities documented in this progress report or require additional information, please call me at "non responsive based on revised scope"

Sincerely,

MONTROSE

"non responsive based on revised scope"

Enclosures w-CD

cc: Wayne Harms, PADEP (PDF only, w/o CD)
Janet Serfass, Upper Merion Township (PDF only, w/o CD)
Mitchell Klevan, Mitchell H. Klevan, LLC (PDF only, w/o CD)
Ashton Jones, Upper Merion Township (PDF only, w/o CD)
Geoff Hickman, Public Works Director for UMT (PDF only, w/o CD)

KESSLER

Monthly 03/2022, 03/14/2022

[redacted] 460-254696, Project# 2000-770

Sample Location			EFFLUENT		
Lab ID	NPDES Permit		460-254696-01		
Sample Date	Instantaneous		3/14/2022		
Matrix	Maximum		Groundwater		
Remarks	Discharge Limit				
Parameter		**Units**	**Result**	**Q**	**RL**
Volatiles					
1,1,1-Trichloroethane	400	ug/L	7.6		1
1,1-Dichloroethene	14	ug/L	0.36	J	1
Benzene	10	ug/L		U	1
Chlorobenzene	200	ug/L		U	1
Methylene Chloride	10	ug/L		U	1
Tetrachloroethene	10	ug/L		U	1
Trichloroethene	10	ug/L		U	1
Total Metals					
Manganese	3,000	ug/L	1060		8
Conventionals					
Total Suspended Solids	60	mg/L		U	2.5

Q = Qualifier
RL = Reporting Limit
U = Not Detected
J = Estimated

QA Scientist_ [redacted]

Date 03/24/2022

KESSLER
1st Half 2022 Groundwater, 3/14-15/2022
[non responsive based] 460-254696, Project# 2000-770

Sample Location		RW-1			MW-8			MW-2			MW-2D			MW-3			MW-4			MW-5A			MW-6			MW-7			EB-01-031522			TB-01-031422		
Lab ID		460-254696-02			460-254696-03			460-254696-04			460-254696-05			460-254696-06			460-254696-07			460-254696-08			460-254696-09			460-254696-10			460-254696-11			460-254696-12		
Sample Date		3/14/2022			3/14/2022			3/15/2022			3/15/2022			3/15/2022			3/15/2022			3/15/2022			3/15/2022			3/15/2022			3/15/2022			3/14/2022		
Matrix		Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Aqueous			Aqueous		
Remarks											FD of MW-2																		Equipment Blank			Trip Blank		
Parameter	**Units**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Volatiles																																		
1,1,1-Trichloroethane	ug/L	19		1	17		1		U	1		U	1		U	1		U	1	4 3		1		U	1	16		1		U	1		U	1
1,1,2,2-Tetrachloroethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,1,2-Trichloroethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,1-Dichloroethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1	0 29	J	1		U	1	0 34	J	1		U	1		U	1
1,1-Dichloroethene	ug/L	3 2		1	2 7		1		U	1		U	1		U	1		U	1	0 49	J	1		U	1	1 7		1		U	1		U	1
1,2,4-Trichlorobenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,2-Dibromo-3-Chloropropane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,2-Dibromoethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,2-Dichlorobenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,2-Dichloroethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,2-Dichloropropane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,3-Dichlorobenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,4-Dichlorobenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
2-Butanone (MEK)	ug/L		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5
2-Hexanone	ug/L		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5
4-Methyl-2-pentanone (MIBK)	ug/L		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5
Acetone	ug/L		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5
Benzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Bromoform	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Bromomethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Carbon disulfide	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Carbon tetrachloride	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Chlorobenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1	0 73	J	1		U	1	0 68	J	1		U	1		U	1
Chlorobromomethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Chlorodibromomethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Chloroethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Chloroform	ug/L		U	1		U	1	0 37	J	1	0 33	J	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Chloromethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
cis-1,2-Dichloroethene	ug/L	0 66	J	1	0 74	J	1		U	1		U	1		U	1		U	1	0 86	J	1	0 39	J	1	0 8	J	1		U	1		U	1
cis-1,3-Dichloropropene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Dichlorobromomethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Ethylbenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Methylene Chloride	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Styrene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Tetrachloroethene	ug/L	0 88	J	1	0 79	J	1		U	1		U	1		U	1		U	1		U	1		U	1	0 55	J	1		U	1		U	1
Toluene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
trans-1,2-Dichloroethene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
trans-1,3-Dichloropropene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Trichloroethene	ug/L	34		1	28		1	0 47	J	1	0 34	J	1	0 62	J	1	0 71	J	1	3 1		1		U	1	11		1		U	1		U	1
Vinyl chloride	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Xylenes, Total	ug/L		U	2		U	2		U	2		U	2		U	2		U	2		U	2		U	2		U	2		U	2		U	2
Total Metals																																		
Manganese	ug/L	760		8	1230		8		NA			NA			NA			NA			NA			NA			NA			NA			NA		
Conventionals																																		
Total Suspended Solids	mg/L		U	2 5		U	2 5		NA			NA			NA			NA			NA			NA			NA			NA			NA		

[non responsive based on revised scope]
QA Scientist_

Date 04/06/2022

STANLEY KESSLER
Monthly Depth to Water and Water Elevation Measurements
4/19/2022

Date	MONTHLY DEPTH TO WATER LEVELS (feet)								
	RW-1	MW-2	MW-3	MW-4	MW-5A	MW-6	MW-7	MW-8	PZ-1[1]
4/19/2022	84.52	87.31	72.98	77.19	85.02	95.25	84.30	99.21	84.82

Date	MONTHLY WATER ELEVATIONS (feet)								
	RW-1	MW-2	MW-3	MW-4	MW-5A	MW-6	MW-7	MW-8	PZ-1[1]
Top of Casing Elevation	*142.06*	*147.67*	*148.7*	*149.64*	*144.49*	*156.08*	*142.46*	*148.76*	*142.41*
4/19/2022	57.54	60.36	75.72	72.45	59.47	60.83	58.16	49.55	57.59

Notes:
1 - PZ-1 was installed in February 2003

Revision	Description	Date	By
1	MONITORING WELL SURVEY PERFORMED ON 5/16/02 BY [non responsive based on revision] INC. PHILADELPHIA, PA	5/20/02	B.B.B.
2	MONITORING WELL & PIEZOMETER SURVEY PERFORMED ON 2/10/03 BY [non responsive based on revision] INC. PHILA. PA	2/12/03	B.B.B.

LEGEND

MW-2 MONITORING WELL LOCATION

PZ-1 PIEZOMETER LOCATION

NOTE:

1. WELL RW-1 PUMPING RATE APPROXIMATELY 10 GPM.
2. WELL MW-8 PUMPING RATE APPROXIMATELY 30 GPM.

MW-6 60.83

MW-5A 59.47

MW-7 58.16

RW-1 57.54

MW-8 49.55

MW-4 72.45

MW-3 75.72

MW-2 60.36

PZ-1 57.59

1 STORY MASONRY BUILDING

2 STORY MASONRY BUILDING

FORMER DRUM STORAGE AREA (EAST)

FORMER DRUM STORAGE AREA (WEST)

FORMER RAILROAD TRACKS

EDGE OF PAVING

PUMPING WELL

INFLUENT PIPE

TREATMENT BUILDING

CLEANOUT

EFFLUENT PIPE

OUTFALL LOCATION

CURBED CONCRETE SWALE

GRAVEL

GRASS

INTERMITTENT STREAM

SCALE IN FEET

50 0 50 100

STANLEY KESSLER SITE

KING OF PRUSSIA, PENNSYLVANIA

GROUNDWATER TREATMENT SYSTEM
POTENTIOMETRIC SURFACE MAP
APRIL 19, 2022

Scale:	1"=50'
Originated By:	
Drawn By:	[non responsive]
Checked By:	[non responsive]
Project Mgr:	[non responsive]
Dwg No.	2000770-19
Issued:	

Advanced GeoServices Corp.
1055 Andrew Drive Suite A
West Chester, Pennsylvania 19380
(610) 840-9100
FAX: (610) 840-9199

Project No. 2000-770-01

FIGURE: 1

F:\Projects\2000\2000770-Kessler O-M\Cad\DRAWINGS\2000770\1\2000770-19.dwg

Revision	Description	Date	By
1	MONITORING WELL SURVEY PERFORMED ON 5/16/02 BY [non responsive based on revised scope] INC. PHILADELPHIA, PA	5/20/02	B.B.B.
2	MONITORING WELL & PIEZOMETER SURVEY PERFORMED ON 2/10/03 BY [non responsive based on revised scope] PHILA. PA	2/12/03	B.B.B.

MW-6

10/15/22/39/57/24/14/15/14/9/11/9/7/4/16/16/4.5/3.1/26/6.4/2.7/3.7/2.7/1.7/<1/<1/<1/1.1/1/100/4.9/3.9/
2.6/1.7/<1/<1/<1/<1/<1/<1

1 STORY MASONRY BUILDING

RAMP

31/49/83/19/10/7/4/5/5/5/8/6/8/9/6.7/9.1/2.7/5.6/
15/3.6/2.6/3.4/3.9/4.9/4.5/4.1/3.5/5.7/6.4/14/14/18/
17/9/7.5/3.5/4/4.3/2.8/3.1

MW-5A

FORMER DRUM STORAGE AREA (EAST)

EDGE OF PAVING

MW-4D

MW-4

5/5/11/5/7/4/6/6/9/6/6/1/6/5/11/3.6/5.2/8.7/3.3/3/5/3.8/4.4/1.1/2.6/
2.6/<1/2.2/1.4/2/1.4/1.5/<1/1.1/<1/2/<1/1.2/<1/<1/<1

FORMER RAILROAD TRACKS

GRAVEL

GRAVEL

RW-1

53/38/71/49/120/63/140/71/100/59/130/35/51/44/49/87/90/41/190/73/55/38/
33/27/67/25/34/23/24/24/22/22/31/56/110/58/81/48/53/34

PUMPING WELL

FORMER AIR STRIPPER

INFLUENT PIPE

MW-7

1 STORY MASONRY BUILDING

INFLUENT PIPE

PUMPING WELL

43/29/27/12/19/19/12/20/24/15/12/66/36/46/56/22/15/65/40/
13/12/22/14/20/15/11/19/37/82/38/25/30/23/22/20/10/9/16/
10/11

TREATMENT BUILDING

MW-8

110/35/86/44/93/41/65/38/50/32/66/20/49/43/30/45/51/31/65/38/28/25/21/
23/43/26/29/21/23/21/21/23/26/51/66/45/50/35/43/28

CLEANOUT

EDGE OF PAVING

MW-3

4/4/3/4/2/2/2/3/3/1/2/0.3/2/2/3/1.8/1.2/2.2/1.6/1.1/<1/1.7/1.2/1.2/
<1/<1/<1/1.1/<1/1.4/1.9/2.2/1.5/1.4/<1/<1/<1/<1/<1/<1

EFFLUENT PIPE

FORMER DRUM STORAGE AREA (WEST)

2 STORY MASONRY BUILDING

PZ-1

ELECTRIC TRANSFORMER

GRASS

3' CMP

EDGE OF PAVING

CONCRETE WALL

OVERHANG

EDGE OF PAVING

GATE

GATE

EDGE OF PAVING

INTERMITTENT STREAM

CURBED CONCRETE SWALE

12" CMP

3' CMP

MW-2

EDGE OF PAVING

25/62/200/44/12/4/4/7/1/0.6/19/12/1/30/1.1/1.6/7.3/
1.9/4.9/<1/<1/1.3/<1/<1/<1/<1/5.6/<1/25/4.8/23/2.2/4.5/
2/1.4/<1/<1/<1/<1/<1/<1

OUTFALL LOCATION

CONCRETE SWALE

GRADE STEPS TO SETTLING HORSHAM ROAD

N

50 0 50 100

SCALE IN FEET

LEGEND

MW-2 MONITORING WELL LOCATION

PZ-1 PIEZOMETER LOCATION

MW-4D DECOMMISSIONED MONITORING WELL

NOTE:

1. ALL DATA PRESENTED IN µg /L
2. ALL DATA PRESENTED AS:
   SEPT. 2002/MARCH 2003/SEPT. 2003/MARCH 2004
   /SEPT. 2004/MARCH 2005/SEPT. 2005/MARCH 2006
   /SEPT. 2006/MARCH 2007/SEPT. 2007/MARCH 2008
   /SEPT. 2008/MARCH 2009/SEPT. 2009/MARCH 2010
   /SEPT. 2010/MARCH 2011/SEPT. 2011/MARCH 2012
   /SEPT. 2012/MARCH 2013/SEPT. 2013/MARCH 2014
   /SEPT. 2014/MARCH 2015/SEPT. 2015/MARCH 2016
   /SEPT. 2016/MARCH 2017/SEPT. 2017/MARCH 2018
   /SEPT. 2018/MARCH 2019/SEPT. 2019/MARCH 2020
   /SEPT. 2020/MARCH 2021/SEPT. 2021/MARCH 2022

STA[non responsive based on] KESSLER SITE

KING OF PRUSSIA, PENNSYLVANIA

TCE CONCENTRATIONS
SEMI-ANNUAL SAMPLING EVENTS
SEPTEMBER 2002 TO MARCH 2022

Scale: 1"=50'
Originated By:
Drawn By:
Checked By: [non responsive]
Project Mgr: [non responsive]
Dwg No. 2000770-08A
Issued:

Advanced GeoServices Corp.
1055 Andrew Drive Suite A
West Chester, Pennsylvania 19380
(610) 840-9100
FAX: (610) 840-9199

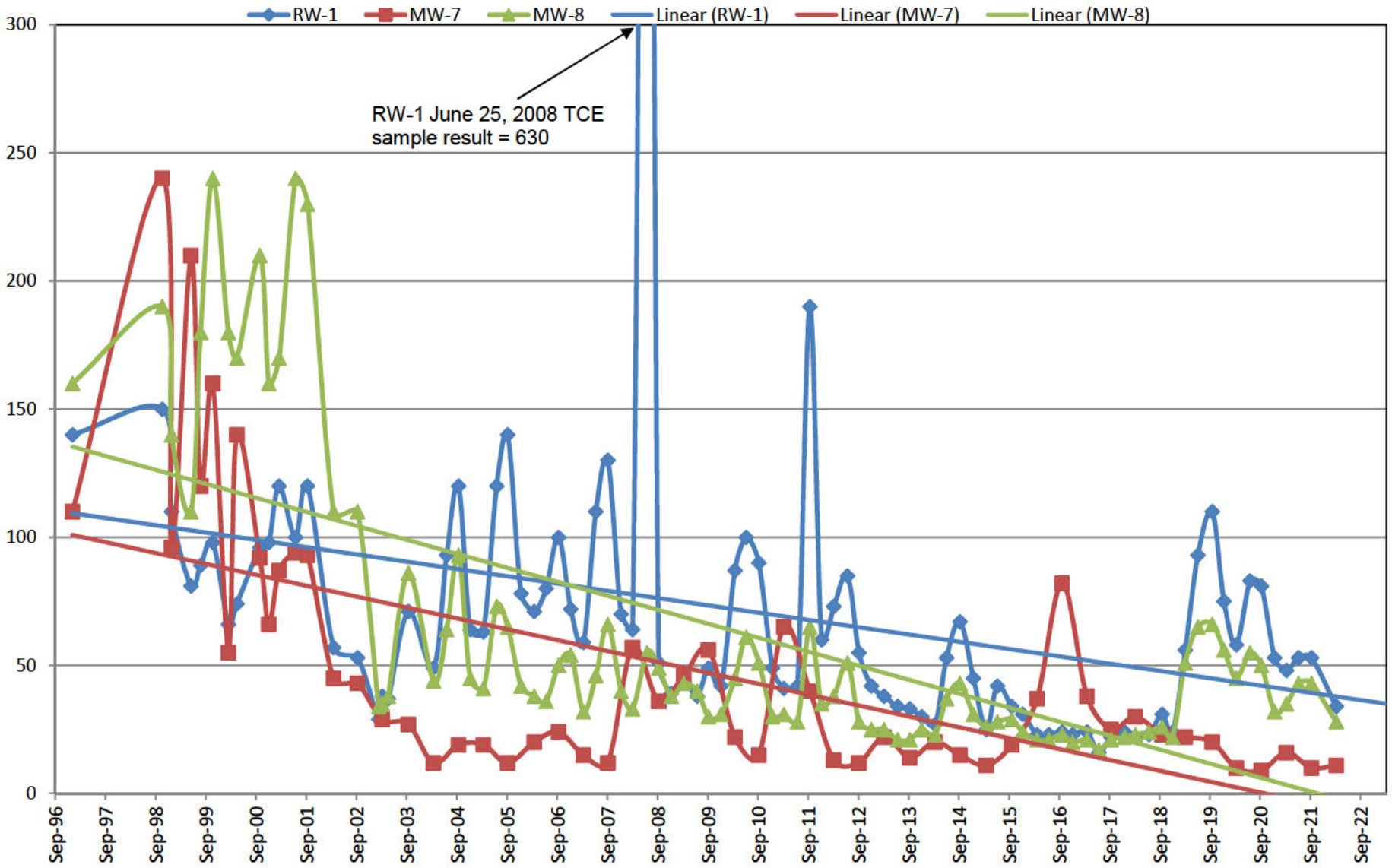
Project No. 2000770-01

FIGURE: 2

F:\Projects\2000\2000770-Kessler O-M\Cad\DRAWINGS\200077001\2000770-08A.dwg

TCE Concentration Trends In RW-1, MW-7 and MW-8

Stanley Kessler Superfund Site

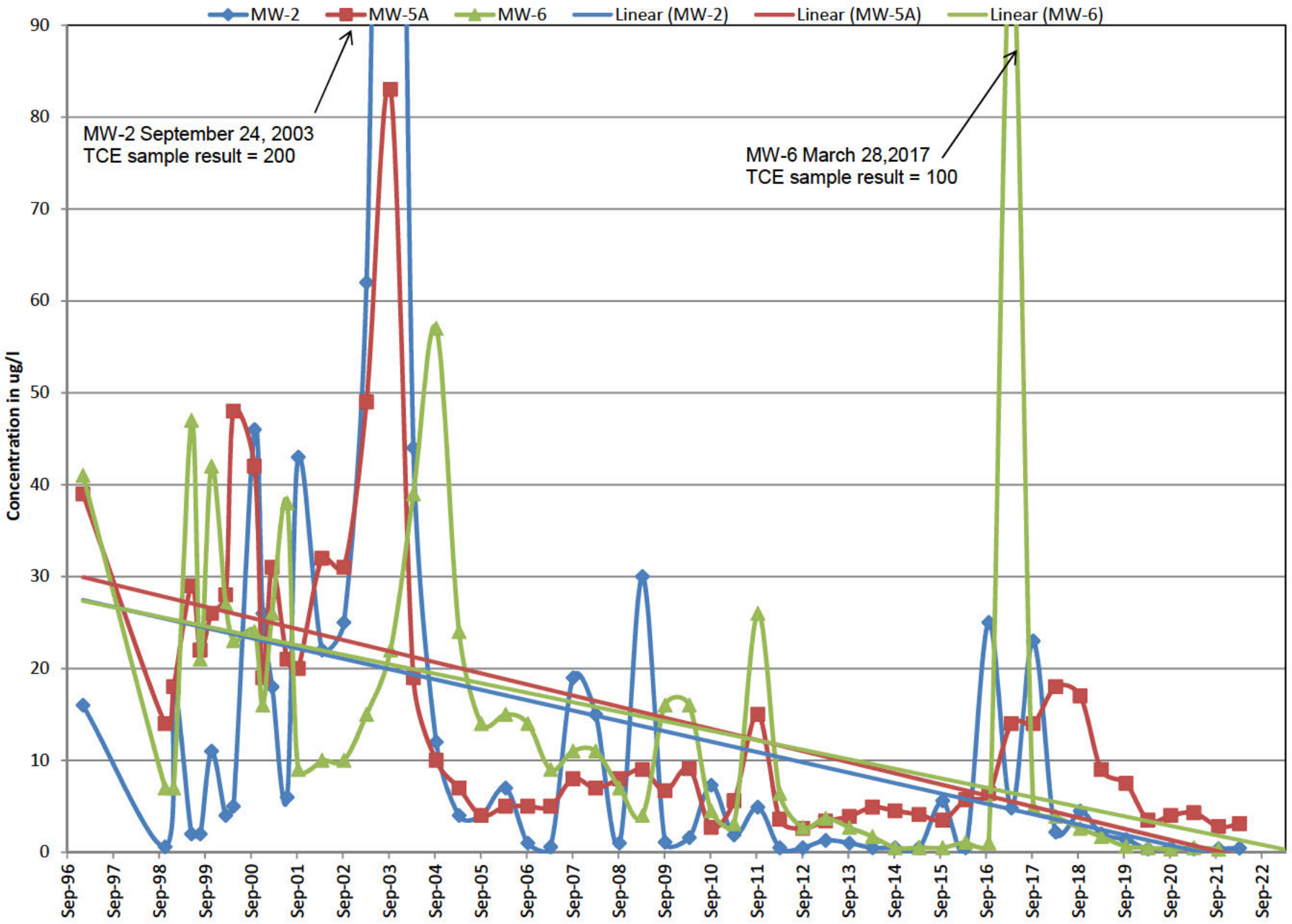


Note: For sampling results which were less then the detection limit, results were assumed to be half of the detection limit to plot the trend lines.

G:\Projects\2000\2000770-Kessler O-M\Work Documents\Concentration Trends\TCE-TCA-Results\TCE in RW-1, MW-7

TCE Concentration Trends in MW-2, MW-5A and MW-6

Stanley Kessler Superfund Site

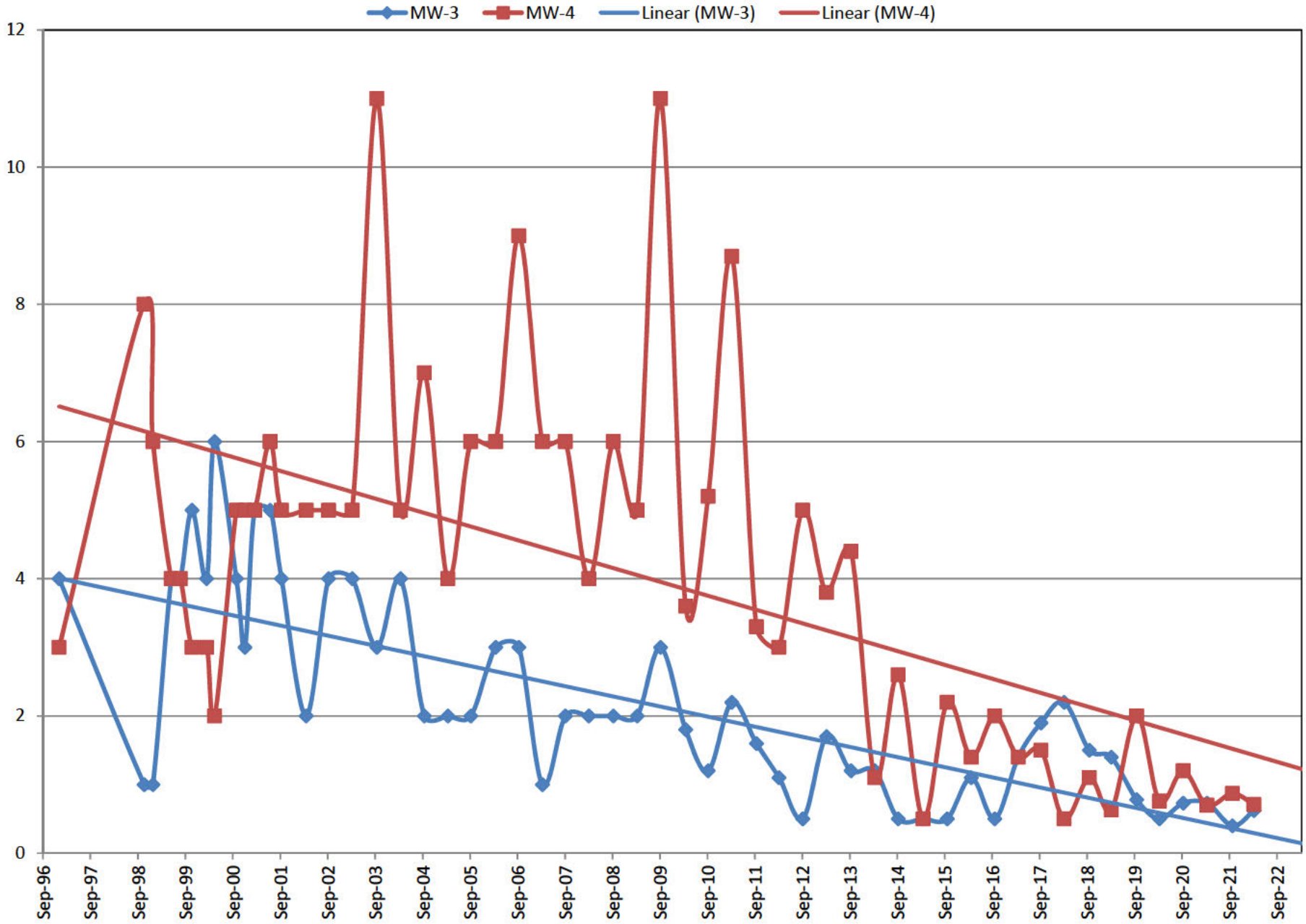


Note: For sampling results which were less then the detection limit, results were assumed to be half of the detection limit to plot the trend lines.

G:\Projects\2000\2000770-Kessler O-M\Work Documents\Concentration Trends\TCE-TCA-Results\TCE in MW-2, MW-5

TCE Concentrations in Background Wells MW-3 and MW-4

Stanley Kessler Superfund Site

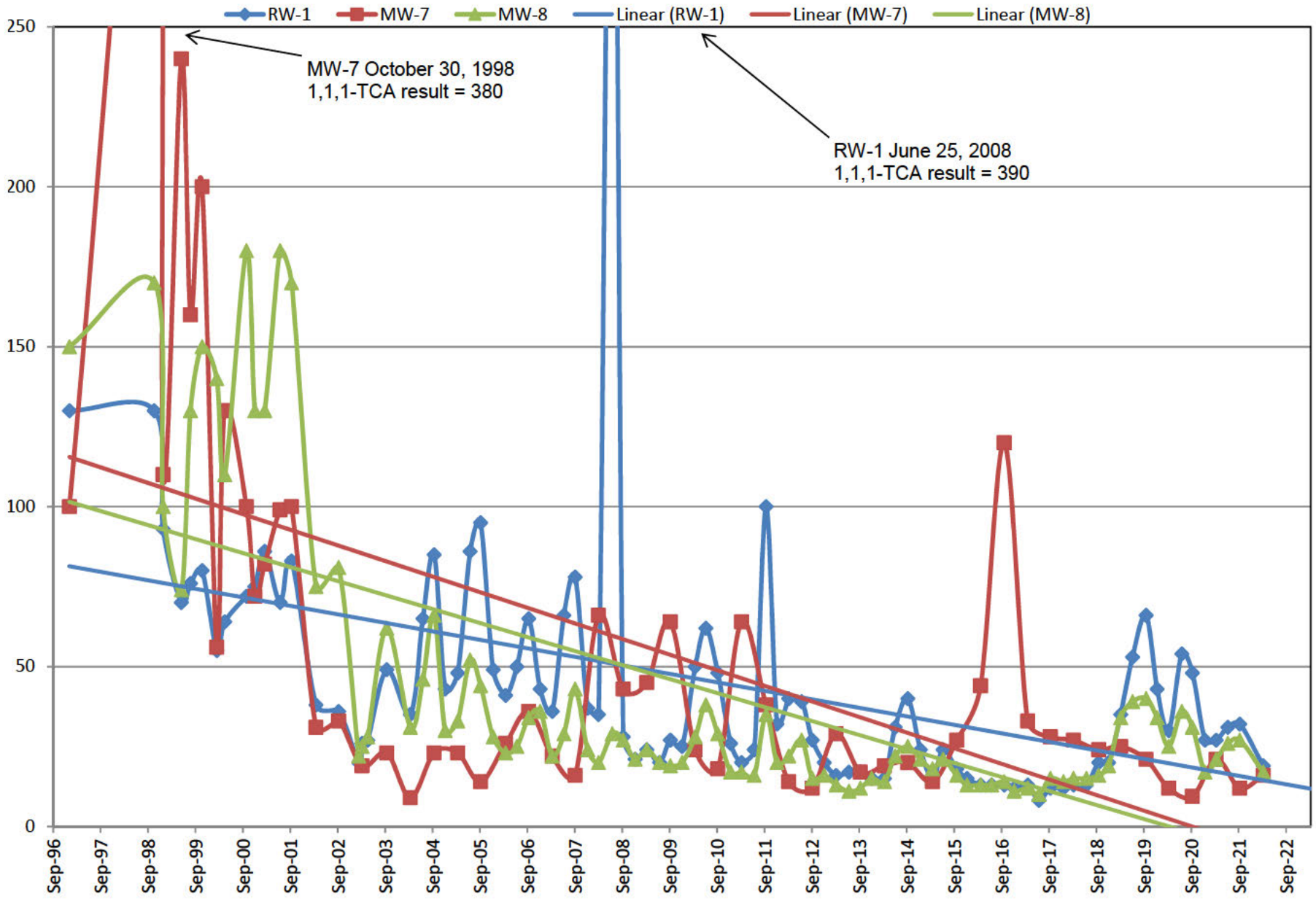


Note: For sampling results which were less then the detection limit, results were assumed to be half of the detection limit to plot the trend lines.

G:\Projects\2000\2000770-Kessler O-M\Work Documents\Concentration Trends\TCE-TCA-Results\TCE in MW-3 and M

1,1,1-TCA Concentrations in RW-1, MW-7 and MW-8

Stanley Kessler Superfund Site

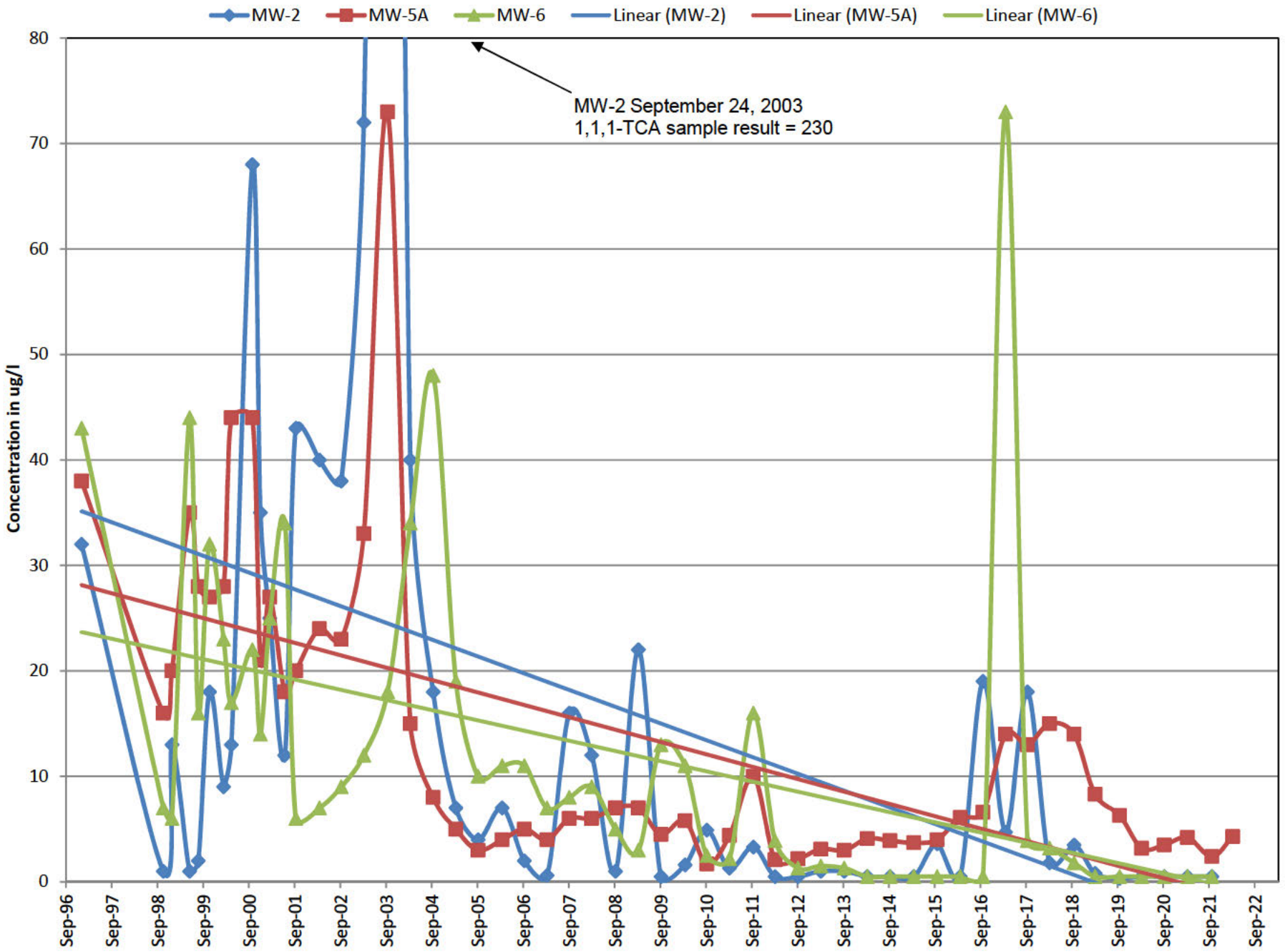


Note: For sampling results which were less then the detection limit, results were assumed to be half of the detection limit to plot the trend lines.

G:\Projects\2000\2000770-Kessler O-M\Work Documents\Concentration Trends\TCE-TCA-Results\1,1,1-TCA in RW-1

1,1,1-TCA Concentrations in MW-2, MW-5A and MW-6

Stanley Kessler Superfund Site

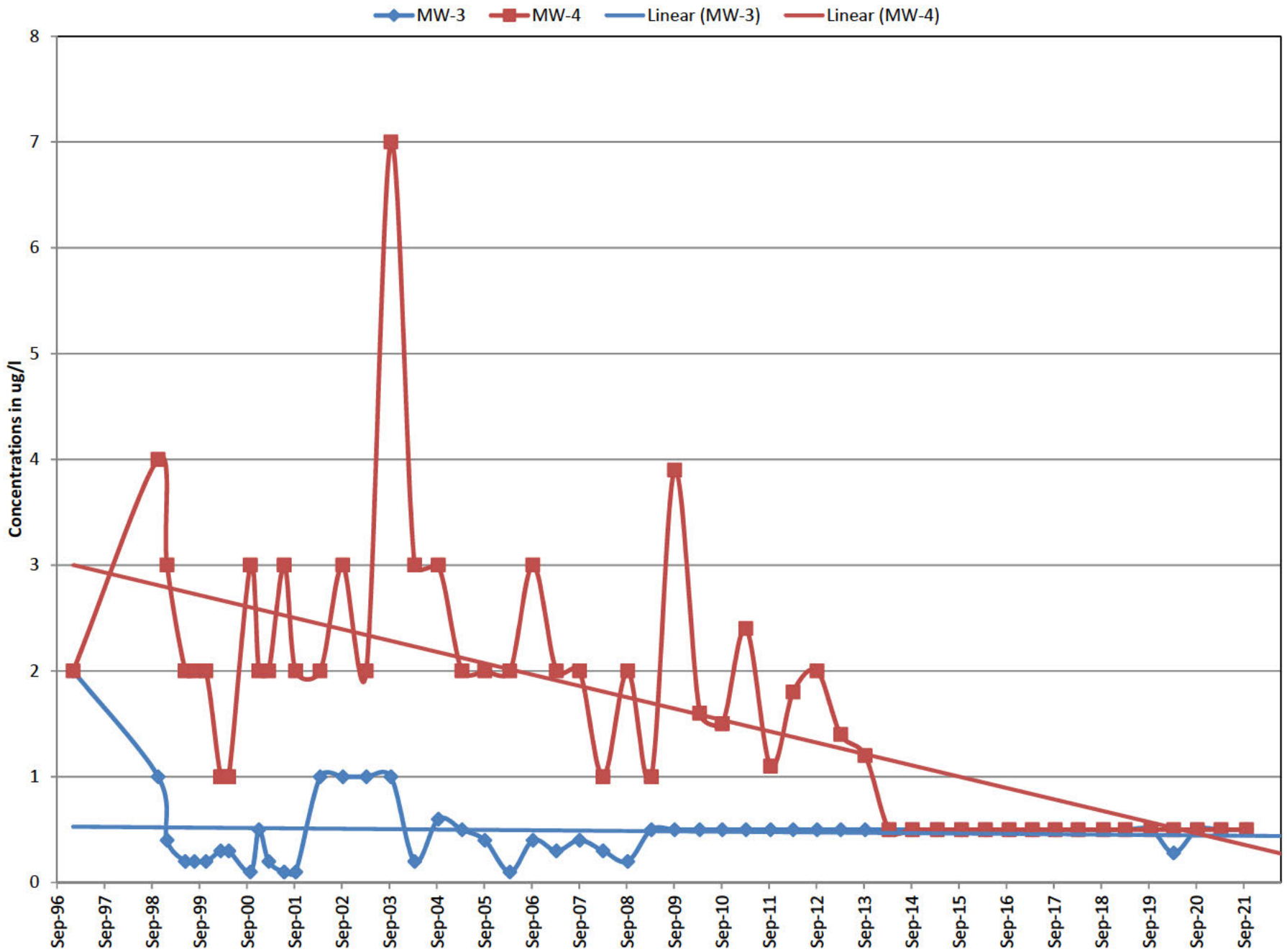


Note: For sampling results which were less then the detection limit, results were assumed to be half of the detection limit to plot the trend lines.

G:\Projects\2000\2000770-Kessler O-M\Work Documents\Concentration Trends\TCE-TCA-Results\1,1,1-TCA in MW-2

1,1,1-TCA Concentrations in Background Wells MW-3 and MW-4

Stanley Kessler Superfund Site

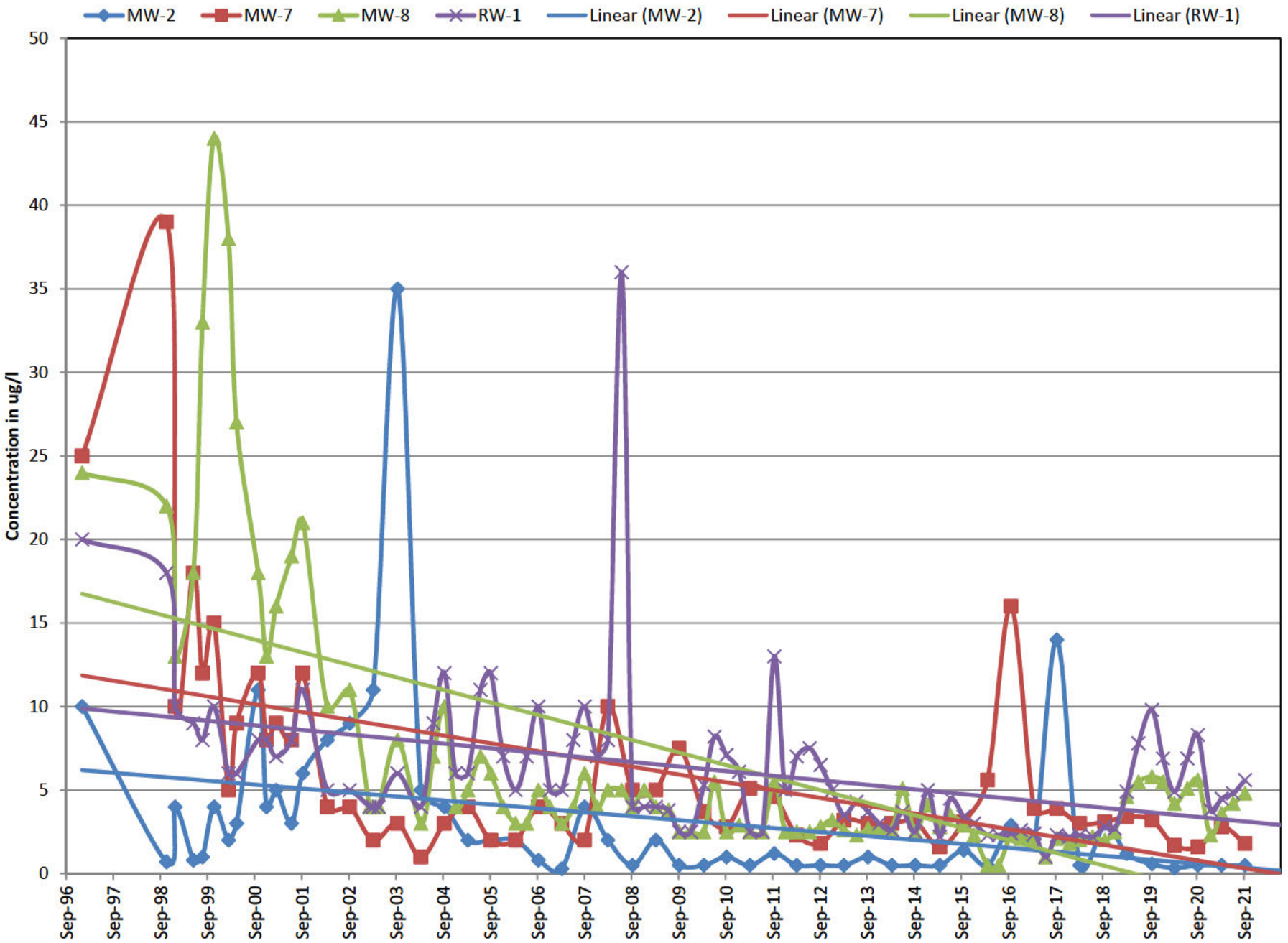


Note: For sampling results which were less then the detection limit, results were assumed to be half of the detection limit to plot the trend lines.

G:\Projects\2000\2000770-Kessler O-M\Work Documents\Concentration Trends\TCE-TCA-Results\1,1,1-TCA in MW-3

1,1-DCE Results in MW-2, MW-7, MW-8 and RW-1

Stanley Kessler Superfund Site



Note: For sampling results which were less then the detection limit, results were assumed to be half of the detection limit to plot the trend lines.

G:\Projects\2000\2000770-Kessler O-M\Work Documents\Concentration Trends\TCE-TCA-Results\1,1-DCE MW-2, MW

DATA VALIDATION SUMMARY
Level I

Site Name: Kessler
Project Number: 2000-770
Sampling Date(s): 3/14/2022

Laboratory: "non responsive based on revised scope"
Case/Order/SDG #: 460-254696

Compound List: Volatiles, Manganese & TSS

Method: 624.1, 6020B & SM 2540D

The following table indicates the data validation criteria examined, any problems identified, and the QA action applied.

Data Validation Criteria:	Accept	FYI	Qualify	Comments
Holding Times	X			
Blank Analysis	X			
Field Duplicate Analysis				NA
Surrogate Recoveries	X			
Matrix Spike Analysis (MS/MSD)		X		Metals MS recovery
Laboratory Control Sample Analysis (LCS)	X			
Laboratory Duplicate Analysis	X			Not project specific (Metals and TSS)
Overall Assessment of Data	X			
Other:				

General Comments: Cooler temp: 1.6°C

Accept - No qualification required.
FYI - For your information only, no qualification necessary.
Qualify - Qualify as rejected, estimated or biased.
NR - Not Reviewed
NA - Not Applicable

QA Scientist___ "non responsive based on revised scope" ____

Date 03/24/2022

Client: Advanced GeoServices Corporation
Project/Site: Kessler

Job ID: 460-254696-1

Client Sample ID: [redacted]

"non responsive based on revised scope"

Lab Sample ID: 460-254696-1
Matrix: Water
Date Collected: 03/14/22 10:05
Date Received: 03/16/22 18:40

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.32	U	1.0	0.32	ug/L			03/20/22 17:03	1
1,1-Dichloroethene	**0.36**	**J**	1.0	0.12	ug/L			03/20/22 17:03	1
1,1,1-Trichloroethane	**7.6**		1.0	0.24	ug/L			03/20/22 17:03	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			03/20/22 17:03	1
Benzene	0.43	U	1.0	0.43	ug/L			03/20/22 17:03	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			03/20/22 17:03	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			03/20/22 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*		*03/20/22 17:03*	*1*
Toluene-d8 (Surr)	*98*		*60 - 140*		*03/20/22 17:03*	*1*
4-Bromofluorobenzene	*93*		*60 - 140*		*03/20/22 17:03*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*		*03/20/22 17:03*	*1*

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1060**		8.0	1.5	ug/L		03/21/22 10:02	03/22/22 19:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	2.5	U	2.5	2.5	mg/L			03/20/22 07:09	1

Client Sample ID: RW-1

Lab Sample ID: 460-254696-2
Matrix: Water
Date Collected: 03/14/22 10:15
Date Received: 03/16/22 18:40

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**19**		1.0	0.24	ug/L			03/21/22 13:44	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			03/21/22 13:44	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			03/21/22 13:44	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			03/21/22 13:44	1
1,1-Dichloroethene	**3.2**		1.0	0.26	ug/L			03/21/22 13:44	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			03/21/22 13:44	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			03/21/22 13:44	1
1,2-Dibromoethane	0.50	U	1.0	0.50	ug/L			03/21/22 13:44	1
1,2-Dichlorobenzene	0.21	U	1.0	0.21	ug/L			03/21/22 13:44	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			03/21/22 13:44	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			03/21/22 13:44	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			03/21/22 13:44	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			03/21/22 13:44	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			03/21/22 13:44	1
2-Hexanone	1.1	U	5.0	1.1	ug/L			03/21/22 13:44	1
4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3	ug/L			03/21/22 13:44	1
Acetone	4.4	U	5.0	4.4	ug/L			03/21/22 13:44	1
Benzene	0.20	U	1.0	0.20	ug/L			03/21/22 13:44	1
Bromoform	0.54	U	1.0	0.54	ug/L			03/21/22 13:44	1
Bromomethane	0.55	U	1.0	0.55	ug/L			03/21/22 13:44	1
Carbon disulfide	0.82	U	1.0	0.82	ug/L			03/21/22 13:44	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			03/21/22 13:44	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			03/21/22 13:44	1

03/24/2022

"non responsive based on revised scope"

HOLDING TIMES
All

Site Name: Kessler

Lab ID	Sample ID	Matrix	Analyte	Sample Date	Date Analyzed	Analysis Hold Time (days)	Days to Analysis	Qualify
460-254696-01	[redacted]	Groundwater	Volatiles	3/14/2022	3/20/2022	14	6	
460-254696-01	[redacted]	Groundwater	Manganese	3/14/2022	3/22/2022	180	8	
460-254696-01	[redacted]	Groundwater	Total Suspended Solids	3/14/2022	3/20/2022	7	6	

[redacted]
03/24/2022

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-254696-3 MSD
Matrix: Water
Analysis Batch: 834599

Client Sample ID: MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	0.38	U	20.0	20.4		ug/L		102	80 - 119	0	30
Chlorobromomethane	0.41	U	20.0	21.2		ug/L		106	73 - 126	1	30
Chlorodibromomethane	0.28	U	20.0	20.8		ug/L		104	58 - 130	1	30
Chloroethane	0.32	U	20.0	22.0		ug/L		110	50 - 150	7	30
Chloroform	0.33	U	20.0	20.7		ug/L		104	78 - 125	2	30
Chloromethane	0.40	U	20.0	18.2		ug/L		91	38 - 150	3	30
cis-1,2-Dichloroethene	0.74	J	20.0	21.3		ug/L		103	78 - 121	2	30
cis-1,3-Dichloropropene	0.22	U	20.0	18.9		ug/L		94	74 - 125	0	30
Dichlorobromomethane	0.34	U	20.0	21.0		ug/L		105	72 - 121	0	30
Ethylbenzene	0.30	U	20.0	19.9		ug/L		99	78 - 120	2	30
Methylene Chloride	0.32	U	20.0	20.0		ug/L		100	74 - 127	3	30
Styrene	0.42	U	20.0	20.8		ug/L		104	75 - 127	2	30
Tetrachloroethene	0.79	J	20.0	21.8		ug/L		105	70 - 127	0	30
Toluene	0.38	U	20.0	20.1		ug/L		100	78 - 119	2	30
trans-1,2-Dichloroethene	0.24	U	20.0	19.9		ug/L		100	74 - 126	2	30
trans-1,3-Dichloropropene	0.22	U	20.0	20.1		ug/L		101	66 - 127	1	30
Trichloroethene	28		20.0	44.7		ug/L		81	71 - 121	3	30
Vinyl chloride	0.17	U	20.0	19.0		ug/L		95	61 - 144	5	30
Xylenes, Total	0.65	U	40.0	40.7		ug/L		102	78 - 122	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 123*
4-Bromofluorobenzene	*101*		*76 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 124*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 460-834577/1-A
Matrix: Water
Analysis Batch: 834859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 834577

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.5	U	8.0	1.5	ug/L		03/20/22 19:46	03/22/22 19:32	1

Lab Sample ID: LCS 460-834577/2-A
Matrix: Water
Analysis Batch: 834859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 834577

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Manganese			250	262.1		ug/L		105	80 - 120		

Lab Sample ID: 460-254696-3 MS
Matrix: Water
Analysis Batch: 834859

Client Sample ID: MW-8
Prep Type: Total/NA
Prep Batch: 834577

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
Manganese	1230		250	1545	4	ug/L		128	75 - 125	[redacted]

non responsive base

03/24/2022

non responsive based on revised scope

DATA VALIDATION REPORT

OF

STANLEY KESSLER SUPERFUND SITE

GROUNDWATER SAMPLES

COLLECTED ON MARCH 14-15, 2022

FOR

VOLATILE ORGANIC, INORGANIC AND
CONVENTIONAL ANALYSES

LABORATORY SAMPLE DELIVERY GROUP 460-254696

PREPARED FOR:

STANLEY KESSLER AND COMPANY
STANLEY KESSLER SUPERFUND SITE
KING OF PRUSSIA, PENNSYLVANIA

PREPARED BY:

ADVANCED GEOSERVICES CORP.
WEST CHESTER, PENNSYLVANIA

PROJECT NUMBER 2000-770-03
April 7, 2022

DATA VALIDATION REPORT
VOLATILE ORGANIC COMPOUNDS

INTRODUCTION

This data validation report addresses the volatile organic results from the groundwater samples collected on March 14-15, 2022 as part of the Stanley Kessler Superfund Site, King of Prussia, Pennsylvania Semiannual Groundwater Investigation sampling event. Eight groundwater samples and a sample duplicate were analyzed for the target compound list (TCL) volatile organic compounds (VOCs) by USEPA *Test Methods for Evaluating Solid Waste Physical/Chemical Methods* (SW-846) Method 8260D. Samples were historically analyzed by USEPA Contract Laboratory Program (CLP) Statement of Work for Organic Analysis, Low Concentration Water, March 1995 (OLC02.1). At the laboratories request beginning in 2019 and upon review the methodology utilized was updated to the current SW-846 Volatile method. All samples were analyzed by "non responsive based on revised scope" and reported under SDG 460-254696.

This review has been performed in accordance with the EPA "Contract Laboratory Program National Functional Guidelines for Organic Superfunds Methods Data Review," January 2017, with EPA Region III Modifications, September, 1994, when applicable. The findings presented in this report are based upon a review of all data supplied by the laboratory. The information examined consisted of sample results, analytical holding times, initial and continuing calibrations, gas chromatographic/mass spectrometric (GC/MS) instrument performance check, blank analysis results, laboratory control sample recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), surrogate spike recoveries, internal standard areas and retention times.

The qualified analytical results are presented on the data summary table. The data summary table lists all compounds which were analyzed and the associated results and qualifiers. Supporting documentation summarizing the specifics of this review is presented at the end of this report.

The method hold times were met for all samples. The GC/MS instrument performance check (BFB), internal standard areas and retention times were within the method criteria. All volatile system monitoring compound recoveries were within acceptance limits. No blank contamination was present. The laboratory control sample (LCS) recoveries were within acceptable limits. The MS/MSD recoveries for the parent sample MW-8 were within the laboratory control limits. The duplicate precision for the field duplicate sample, MW-2 were within acceptable criteria.

QUALIFIERS

No qualifiers were assigned.

SUMMARY

All data are usable as reported.

DATA VALIDATION REPORT
INORGANIC ANALYSES

INTRODUCTION

This data validation report addresses the metal results from two groundwater samples collected on March 14, 2022 as part of the Stanley Kessler Superfund Site, King of Prussia, Pennsylvania Semiannual Groundwater Investigation sampling event. The samples were analyzed for Manganese using USEPA SW846 Method 6020B. All samples were analyzed by [non responsive based on revised scope] [non responsive based] and reported under SDG 460-254696.

This review has been performed with guidance from the EPA "Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review," January 2017, and EPA Region III modifications, April, 1993, when applicable. The findings presented in this report are based upon a review of all data supplied by the laboratory. The information examined consists (when applicable) of sample results, analytical holding times, initial and continuing calibrations, blank analysis results, laboratory control sample recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, relative percent differences (RPDs), contract required detection limits (CRDL), ICP interference check and serial dilutions.

The qualified analytical results are presented on the data summary table. The data summary tables list detected, undetected results and any qualifiers which have been applied. Support documentation summarizing the specifics of this review is presented at the end of this report.

The method hold times were met for all samples. The initial and continuing calibration verification recoveries were within acceptance limits. No blank contamination was present. Matrix spike/matrix spike duplicate recoveries, laboratory control sample, serial dilution and the ICP interference checks recoveries were within acceptable limits. The Laboratory duplicate sample was also within acceptable limits.

QUALIFIER

No qualifiers were assigned.

SUMMARY

All data are usable as reported.

DATA VALIDATION REPORT
CONVENTIONAL PARAMETERS

INTRODUCTION

This data validation report addresses the conventional results from two groundwater samples collected on March 14, 2022 as part of the Stanley Kessler Superfund Site, King of Prussia, Pennsylvania Semiannual Groundwater Investigation sampling event. The samples were analyzed for total suspended solids (TSS) using Standard Methods 2540D. All samples were analyzed by [redacted] and reported under SDG 460-254696.

This review has been performed in accordance with the US EPA "Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review," January 2017, and EPA Region III Modifications, April, 1993, when applicable. The findings presented in this report are based upon a review of all data supplied by the laboratory. The information examined consisted of sample results, analytical holding times, blank analysis results, laboratory control sample recoveries, RPDs, and laboratory duplicates.

The qualified analytical results are presented on the data summary table. The data summary table lists all compounds that were analyzed and associated results and qualifiers. Support documentation summarizing the specifics of this review is presented at the end of this report.

Samples were analyzed within the method hold times. No blank contamination was present. Laboratory control percent recoveries were within control limits. The laboratory duplicate relative percent differences were within control limits. All TSS results are acceptable as reported.

QUALIFIERS

No qualifiers were assigned.

SUMMARY

All data are usable as reported.

QUALIFIER CODES

U - The analyte was analyzed for, but was not detected at the reporting limit.

UJ - The analyte was not detected; the associated reporting limit is an estimated value.

J - The analyte was positively identified and detected; however, the concentration is an estimated value because the result is less than the reporting limit or quality control criteria were not met.

R - The value reported has been rejected.

D - The value was obtained from a diluted sample.

SUPPORT DOCUMENTATION

VOLATILES DATA VALIDATION SUMMARY

Site Name: Kessler
Project Number: 2000-770
Sampling Date(s): 3/14-15/2022

Laboratory: "non responsive based on revised scope"
Case/Order No.: 460-254696

Compound List: Volatiles

Method: 8260D

The following table indicates the data validation criteria examined, any problems identified, and the QA action applied.

Data Validation Criteria:	Accept	FYI	Qualify	Comments
Holding Times	X			The updated method 8260D and the National Functional Guidelines (11/2020) no longer requires the analysis and verification of a BFB tune every 12 hours. Per the updates the BFB tunes are only required to be analyzed and verified with the initial calibration.
GC/MS Tuning	X			
Initial Calibrations	X			
Continuing Calibrations	X			
Blank Analysis	X			
System Monitoring/Surrogate	X			
Field Duplicate Analysis	X			MW-2 & MW-2D
Matrix Spike Analysis (MS/MSD)	X			MW-8
Laboratory Control Sample Analysis (LCS)	X			
Internal Standard Areas/RT	X			
Target Compound Identification	X			
TIC Identification				NA
Overall Assessment of Data	X			
Other:	X			

General Comments: Cooler Temp: 1.6°C

Accept - No qualification required.
FYI - For your information only, no qualification necessary.
Qualify - Qualify as rejected, estimated or biased.
NR - Not Reviewed
NA - Not Applicable

QA Scientist_"non responsive based on revised scope"

Date 04/05/2022

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: RW-1 Lab Sample ID: 460-254696-2

Matrix: Water Lab File ID: T63050.D

Analysis Method: 8260D Date Collected: 03/14/2022 10:15

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 13:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	19		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.26	U	1.0	0.26
75-35-4	1,1-Dichloroethene	3.2		1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	0.37	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38
106-93-4	1,2-Dibromoethane	0.50	U	1.0	0.50
95-50-1	1,2-Dichlorobenzene	0.21	U	1.0	0.21
107-06-2	1,2-Dichloroethane	0.43	U	1.0	0.43
78-87-5	1,2-Dichloropropane	0.35	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.34	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	0.33	U	1.0	0.33
78-93-3	2-Butanone (MEK)	1.9	U	5.0	1.9
591-78-6	2-Hexanone	1.1	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3
67-64-1	Acetone	4.4	U	5.0	4.4
71-43-2	Benzene	0.20	U	1.0	0.20
75-25-2	Bromoform	0.54	U	1.0	0.54
74-83-9	Bromomethane	0.55	U	1.0	0.55
75-15-0	Carbon disulfide	0.82	U	1.0	0.82
56-23-5	Carbon tetrachloride	0.21	U	1.0	0.21
108-90-7	Chlorobenzene	0.38	U	1.0	0.38
74-97-5	Chlorobromomethane	0.41	U	1.0	0.41
124-48-1	Chlorodibromomethane	0.28	U	1.0	0.28
75-00-3	Chloroethane	0.32	U	1.0	0.32
67-66-3	Chloroform	0.33	U	1.0	0.33
74-87-3	Chloromethane	0.40	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.66	J	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	0.22	U	1.0	0.22
75-27-4	Dichlorobromomethane	0.34	U	1.0	0.34
100-41-4	Ethylbenzene	0.30	U	1.0	0.30
75-09-2	Methylene Chloride	0.32	U	1.0	0.32
100-42-5	Styrene	0.42	U	1.0	0.42
127-18-4	Tetrachloroethene	0.88	J	1.0	0.25
108-88-3	Toluene	0.38	U	1.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: [non responsive based on revised scope] Job No.: 460-254696-1

SDG No.:

Client Sample ID: RW-1 Lab Sample ID: 460-254696-2

Matrix: Water Lab File ID: T63050.D

Analysis Method: 8260D Date Collected: 03/14/2022 10:15

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 13:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.24	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	0.22	U	1.0	0.22
79-01-6	Trichloroethene	34		1.0	0.31
75-01-4	Vinyl chloride	0.17	U	1.0	0.17
1330-20-7	Xylenes, Total	0.65	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		75-123
460-00-4	4-Bromofluorobenzene	105		76-120
1868-53-7	Dibromofluoromethane (Surr)	107		77-124
2037-26-5	Toluene-d8 (Surr)	96		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-8 Lab Sample ID: 460-254696-3

Matrix: Water Lab File ID: T63049.D

Analysis Method: 8260D Date Collected: 03/14/2022 10:30

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 13:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	17		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.26	U	1.0	0.26
75-35-4	1,1-Dichloroethene	2.7		1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	0.37	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38
106-93-4	1,2-Dibromoethane	0.50	U	1.0	0.50
95-50-1	1,2-Dichlorobenzene	0.21	U	1.0	0.21
107-06-2	1,2-Dichloroethane	0.43	U	1.0	0.43
78-87-5	1,2-Dichloropropane	0.35	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.34	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	0.33	U	1.0	0.33
78-93-3	2-Butanone (MEK)	1.9	U	5.0	1.9
591-78-6	2-Hexanone	1.1	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3
67-64-1	Acetone	4.4	U	5.0	4.4
71-43-2	Benzene	0.20	U	1.0	0.20
75-25-2	Bromoform	0.54	U	1.0	0.54
74-83-9	Bromomethane	0.55	U	1.0	0.55
75-15-0	Carbon disulfide	0.82	U	1.0	0.82
56-23-5	Carbon tetrachloride	0.21	U	1.0	0.21
108-90-7	Chlorobenzene	0.38	U	1.0	0.38
74-97-5	Chlorobromomethane	0.41	U	1.0	0.41
124-48-1	Chlorodibromomethane	0.28	U	1.0	0.28
75-00-3	Chloroethane	0.32	U	1.0	0.32
67-66-3	Chloroform	0.33	U	1.0	0.33
74-87-3	Chloromethane	0.40	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.74	J	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	0.22	U	1.0	0.22
75-27-4	Dichlorobromomethane	0.34	U	1.0	0.34
100-41-4	Ethylbenzene	0.30	U	1.0	0.30
75-09-2	Methylene Chloride	0.32	U	1.0	0.32
100-42-5	Styrene	0.42	U	1.0	0.42
127-18-4	Tetrachloroethene	0.79	J	1.0	0.25
108-88-3	Toluene	0.38	U	1.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: "non responsive based on revised scope" Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-8 Lab Sample ID: 460-254696-3

Matrix: Water Lab File ID: T63049.D

Analysis Method: 8260D Date Collected: 03/14/2022 10:30

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 13:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.24	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	0.22	U	1.0	0.22
79-01-6	Trichloroethene	28		1.0	0.31
75-01-4	Vinyl chloride	0.17	U	1.0	0.17
1330-20-7	Xylenes, Total	0.65	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		75-123
460-00-4	4-Bromofluorobenzene	104		76-120
1868-53-7	Dibromofluoromethane (Surr)	108		77-124
2037-26-5	Toluene-d8 (Surr)	97		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: [non responsive based on revised scope] Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-2 Lab Sample ID: 460-254696-4

Matrix: Water Lab File ID: T63051.D

Analysis Method: 8260D Date Collected: 03/15/2022 08:03

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 14:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.26	U	1.0	0.26
75-35-4	1,1-Dichloroethene	0.26	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	0.37	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38
106-93-4	1,2-Dibromoethane	0.50	U	1.0	0.50
95-50-1	1,2-Dichlorobenzene	0.21	U	1.0	0.21
107-06-2	1,2-Dichloroethane	0.43	U	1.0	0.43
78-87-5	1,2-Dichloropropane	0.35	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.34	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	0.33	U	1.0	0.33
78-93-3	2-Butanone (MEK)	1.9	U	5.0	1.9
591-78-6	2-Hexanone	1.1	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3
67-64-1	Acetone	4.4	U	5.0	4.4
71-43-2	Benzene	0.20	U	1.0	0.20
75-25-2	Bromoform	0.54	U	1.0	0.54
74-83-9	Bromomethane	0.55	U	1.0	0.55
75-15-0	Carbon disulfide	0.82	U	1.0	0.82
56-23-5	Carbon tetrachloride	0.21	U	1.0	0.21
108-90-7	Chlorobenzene	0.38	U	1.0	0.38
74-97-5	Chlorobromomethane	0.41	U	1.0	0.41
124-48-1	Chlorodibromomethane	0.28	U	1.0	0.28
75-00-3	Chloroethane	0.32	U	1.0	0.32
67-66-3	Chloroform	0.37	J	1.0	0.33
74-87-3	Chloromethane	0.40	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.22	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	0.22	U	1.0	0.22
75-27-4	Dichlorobromomethane	0.34	U	1.0	0.34
100-41-4	Ethylbenzene	0.30	U	1.0	0.30
75-09-2	Methylene Chloride	0.32	U	1.0	0.32
100-42-5	Styrene	0.42	U	1.0	0.42
127-18-4	Tetrachloroethene	0.25	U	1.0	0.25
108-88-3	Toluene	0.38	U	1.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: "non responsive based on revised scope" [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-2 Lab Sample ID: 460-254696-4

Matrix: Water Lab File ID: T63051.D

Analysis Method: 8260D Date Collected: 03/15/2022 08:03

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 14:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.24	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	0.22	U	1.0	0.22
79-01-6	Trichloroethene	0.47	J	1.0	0.31
75-01-4	Vinyl chloride	0.17	U	1.0	0.17
1330-20-7	Xylenes, Total	0.65	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		75-123
460-00-4	4-Bromofluorobenzene	100		76-120
1868-53-7	Dibromofluoromethane (Surr)	106		77-124
2037-26-5	Toluene-d8 (Surr)	94		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: "non responsive based on revised scope" Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-2D Lab Sample ID: 460-254696-5

Matrix: Water Lab File ID: T63052.D

Analysis Method: 8260D Date Collected: 03/15/2022 08:13

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 14:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.26	U	1.0	0.26
75-35-4	1,1-Dichloroethene	0.26	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	0.37	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38
106-93-4	1,2-Dibromoethane	0.50	U	1.0	0.50
95-50-1	1,2-Dichlorobenzene	0.21	U	1.0	0.21
107-06-2	1,2-Dichloroethane	0.43	U	1.0	0.43
78-87-5	1,2-Dichloropropane	0.35	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.34	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	0.33	U	1.0	0.33
78-93-3	2-Butanone (MEK)	1.9	U	5.0	1.9
591-78-6	2-Hexanone	1.1	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3
67-64-1	Acetone	4.4	U	5.0	4.4
71-43-2	Benzene	0.20	U	1.0	0.20
75-25-2	Bromoform	0.54	U	1.0	0.54
74-83-9	Bromomethane	0.55	U	1.0	0.55
75-15-0	Carbon disulfide	0.82	U	1.0	0.82
56-23-5	Carbon tetrachloride	0.21	U	1.0	0.21
108-90-7	Chlorobenzene	0.38	U	1.0	0.38
74-97-5	Chlorobromomethane	0.41	U	1.0	0.41
124-48-1	Chlorodibromomethane	0.28	U	1.0	0.28
75-00-3	Chloroethane	0.32	U	1.0	0.32
67-66-3	Chloroform	0.33	J	1.0	0.33
74-87-3	Chloromethane	0.40	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.22	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	0.22	U	1.0	0.22
75-27-4	Dichlorobromomethane	0.34	U	1.0	0.34
100-41-4	Ethylbenzene	0.30	U	1.0	0.30
75-09-2	Methylene Chloride	0.32	U	1.0	0.32
100-42-5	Styrene	0.42	U	1.0	0.42
127-18-4	Tetrachloroethene	0.25	U	1.0	0.25
108-88-3	Toluene	0.38	U	1.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: "non responsive based on revised scope" Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-2D Lab Sample ID: 460-254696-5

Matrix: Water Lab File ID: T63052.D

Analysis Method: 8260D Date Collected: 03/15/2022 08:13

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 14:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.24	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	0.22	U	1.0	0.22
79-01-6	Trichloroethene	0.34	J	1.0	0.31
75-01-4	Vinyl chloride	0.17	U	1.0	0.17
1330-20-7	Xylenes, Total	0.65	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-123
460-00-4	4-Bromofluorobenzene	102		76-120
1868-53-7	Dibromofluoromethane (Surr)	107		77-124
2037-26-5	Toluene-d8 (Surr)	95		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: "non responsive based on revised scope" Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-3 Lab Sample ID: 460-254696-6

Matrix: Water Lab File ID: T63053.D

Analysis Method: 8260D Date Collected: 03/15/2022 09:32

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 14:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.26	U	1.0	0.26
75-35-4	1,1-Dichloroethene	0.26	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	0.37	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38
106-93-4	1,2-Dibromoethane	0.50	U	1.0	0.50
95-50-1	1,2-Dichlorobenzene	0.21	U	1.0	0.21
107-06-2	1,2-Dichloroethane	0.43	U	1.0	0.43
78-87-5	1,2-Dichloropropane	0.35	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.34	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	0.33	U	1.0	0.33
78-93-3	2-Butanone (MEK)	1.9	U	5.0	1.9
591-78-6	2-Hexanone	1.1	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3
67-64-1	Acetone	4.4	U	5.0	4.4
71-43-2	Benzene	0.20	U	1.0	0.20
75-25-2	Bromoform	0.54	U	1.0	0.54
74-83-9	Bromomethane	0.55	U	1.0	0.55
75-15-0	Carbon disulfide	0.82	U	1.0	0.82
56-23-5	Carbon tetrachloride	0.21	U	1.0	0.21
108-90-7	Chlorobenzene	0.38	U	1.0	0.38
74-97-5	Chlorobromomethane	0.41	U	1.0	0.41
124-48-1	Chlorodibromomethane	0.28	U	1.0	0.28
75-00-3	Chloroethane	0.32	U	1.0	0.32
67-66-3	Chloroform	0.33	U	1.0	0.33
74-87-3	Chloromethane	0.40	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.22	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	0.22	U	1.0	0.22
75-27-4	Dichlorobromomethane	0.34	U	1.0	0.34
100-41-4	Ethylbenzene	0.30	U	1.0	0.30
75-09-2	Methylene Chloride	0.32	U	1.0	0.32
100-42-5	Styrene	0.42	U	1.0	0.42
127-18-4	Tetrachloroethene	0.25	U	1.0	0.25
108-88-3	Toluene	0.38	U	1.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-3 Lab Sample ID: 460-254696-6

Matrix: Water Lab File ID: T63053.D

Analysis Method: 8260D Date Collected: 03/15/2022 09:32

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 14:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.24	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	0.22	U	1.0	0.22
79-01-6	Trichloroethene	0.62	J	1.0	0.31
75-01-4	Vinyl chloride	0.17	U	1.0	0.17
1330-20-7	Xylenes, Total	0.65	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		75-123
460-00-4	4-Bromofluorobenzene	103		76-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-124
2037-26-5	Toluene-d8 (Surr)	96		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: "non responsive based on revised scope" [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-4 Lab Sample ID: 460-254696-7

Matrix: Water Lab File ID: T63054.D

Analysis Method: 8260D Date Collected: 03/15/2022 11:26

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 15:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.26	U	1.0	0.26
75-35-4	1,1-Dichloroethene	0.26	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	0.37	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38
106-93-4	1,2-Dibromoethane	0.50	U	1.0	0.50
95-50-1	1,2-Dichlorobenzene	0.21	U	1.0	0.21
107-06-2	1,2-Dichloroethane	0.43	U	1.0	0.43
78-87-5	1,2-Dichloropropane	0.35	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.34	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	0.33	U	1.0	0.33
78-93-3	2-Butanone (MEK)	1.9	U	5.0	1.9
591-78-6	2-Hexanone	1.1	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3
67-64-1	Acetone	4.4	U	5.0	4.4
71-43-2	Benzene	0.20	U	1.0	0.20
75-25-2	Bromoform	0.54	U	1.0	0.54
74-83-9	Bromomethane	0.55	U	1.0	0.55
75-15-0	Carbon disulfide	0.82	U	1.0	0.82
56-23-5	Carbon tetrachloride	0.21	U	1.0	0.21
108-90-7	Chlorobenzene	0.38	U	1.0	0.38
74-97-5	Chlorobromomethane	0.41	U	1.0	0.41
124-48-1	Chlorodibromomethane	0.28	U	1.0	0.28
75-00-3	Chloroethane	0.32	U	1.0	0.32
67-66-3	Chloroform	0.33	U	1.0	0.33
74-87-3	Chloromethane	0.40	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.22	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	0.22	U	1.0	0.22
75-27-4	Dichlorobromomethane	0.34	U	1.0	0.34
100-41-4	Ethylbenzene	0.30	U	1.0	0.30
75-09-2	Methylene Chloride	0.32	U	1.0	0.32
100-42-5	Styrene	0.42	U	1.0	0.42
127-18-4	Tetrachloroethene	0.25	U	1.0	0.25
108-88-3	Toluene	0.38	U	1.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-4 Lab Sample ID: 460-254696-7

Matrix: Water Lab File ID: T63054.D

Analysis Method: 8260D Date Collected: 03/15/2022 11:26

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 15:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.24	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	0.22	U	1.0	0.22
79-01-6	Trichloroethene	0.71	J	1.0	0.31
75-01-4	Vinyl chloride	0.17	U	1.0	0.17
1330-20-7	Xylenes, Total	0.65	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		75-123
460-00-4	4-Bromofluorobenzene	103		76-120
1868-53-7	Dibromofluoromethane (Surr)	107		77-124
2037-26-5	Toluene-d8 (Surr)	96		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: "non responsive based on revised scope" [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-5A Lab Sample ID: 460-254696-8

Matrix: Water Lab File ID: T63055.D

Analysis Method: 8260D Date Collected: 03/15/2022 12:30

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 15:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	4.3		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.29	J	1.0	0.26
75-35-4	1,1-Dichloroethene	0.49	J	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	0.37	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38
106-93-4	1,2-Dibromoethane	0.50	U	1.0	0.50
95-50-1	1,2-Dichlorobenzene	0.21	U	1.0	0.21
107-06-2	1,2-Dichloroethane	0.43	U	1.0	0.43
78-87-5	1,2-Dichloropropane	0.35	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.34	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	0.33	U	1.0	0.33
78-93-3	2-Butanone (MEK)	1.9	U	5.0	1.9
591-78-6	2-Hexanone	1.1	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3
67-64-1	Acetone	4.4	U	5.0	4.4
71-43-2	Benzene	0.20	U	1.0	0.20
75-25-2	Bromoform	0.54	U	1.0	0.54
74-83-9	Bromomethane	0.55	U	1.0	0.55
75-15-0	Carbon disulfide	0.82	U	1.0	0.82
56-23-5	Carbon tetrachloride	0.21	U	1.0	0.21
108-90-7	Chlorobenzene	0.73	J	1.0	0.38
74-97-5	Chlorobromomethane	0.41	U	1.0	0.41
124-48-1	Chlorodibromomethane	0.28	U	1.0	0.28
75-00-3	Chloroethane	0.32	U	1.0	0.32
67-66-3	Chloroform	0.33	U	1.0	0.33
74-87-3	Chloromethane	0.40	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.86	J	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	0.22	U	1.0	0.22
75-27-4	Dichlorobromomethane	0.34	U	1.0	0.34
100-41-4	Ethylbenzene	0.30	U	1.0	0.30
75-09-2	Methylene Chloride	0.32	U	1.0	0.32
100-42-5	Styrene	0.42	U	1.0	0.42
127-18-4	Tetrachloroethene	0.25	U	1.0	0.25
108-88-3	Toluene	0.38	U	1.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: "non responsive based on revised scope" Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-5A Lab Sample ID: 460-254696-8

Matrix: Water Lab File ID: T63055.D

Analysis Method: 8260D Date Collected: 03/15/2022 12:30

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 15:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.24	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	0.22	U	1.0	0.22
79-01-6	Trichloroethene	3.1		1.0	0.31
75-01-4	Vinyl chloride	0.17	U	1.0	0.17
1330-20-7	Xylenes, Total	0.65	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-123
460-00-4	4-Bromofluorobenzene	102		76-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-124
2037-26-5	Toluene-d8 (Surr)	95		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-6 Lab Sample ID: 460-254696-9

Matrix: Water Lab File ID: T63056.D

Analysis Method: 8260D Date Collected: 03/15/2022 14:20

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 15:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.26	U	1.0	0.26
75-35-4	1,1-Dichloroethene	0.26	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	0.37	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38
106-93-4	1,2-Dibromoethane	0.50	U	1.0	0.50
95-50-1	1,2-Dichlorobenzene	0.21	U	1.0	0.21
107-06-2	1,2-Dichloroethane	0.43	U	1.0	0.43
78-87-5	1,2-Dichloropropane	0.35	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.34	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	0.33	U	1.0	0.33
78-93-3	2-Butanone (MEK)	1.9	U	5.0	1.9
591-78-6	2-Hexanone	1.1	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3
67-64-1	Acetone	4.4	U	5.0	4.4
71-43-2	Benzene	0.20	U	1.0	0.20
75-25-2	Bromoform	0.54	U	1.0	0.54
74-83-9	Bromomethane	0.55	U	1.0	0.55
75-15-0	Carbon disulfide	0.82	U	1.0	0.82
56-23-5	Carbon tetrachloride	0.21	U	1.0	0.21
108-90-7	Chlorobenzene	0.38	U	1.0	0.38
74-97-5	Chlorobromomethane	0.41	U	1.0	0.41
124-48-1	Chlorodibromomethane	0.28	U	1.0	0.28
75-00-3	Chloroethane	0.32	U	1.0	0.32
67-66-3	Chloroform	0.33	U	1.0	0.33
74-87-3	Chloromethane	0.40	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.39	J	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	0.22	U	1.0	0.22
75-27-4	Dichlorobromomethane	0.34	U	1.0	0.34
100-41-4	Ethylbenzene	0.30	U	1.0	0.30
75-09-2	Methylene Chloride	0.32	U	1.0	0.32
100-42-5	Styrene	0.42	U	1.0	0.42
127-18-4	Tetrachloroethene	0.25	U	1.0	0.25
108-88-3	Toluene	0.38	U	1.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: "non responsive based on revised scope" Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-6 Lab Sample ID: 460-254696-9

Matrix: Water Lab File ID: T63056.D

Analysis Method: 8260D Date Collected: 03/15/2022 14:20

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 15:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.24	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	0.22	U	1.0	0.22
79-01-6	Trichloroethene	0.31	U	1.0	0.31
75-01-4	Vinyl chloride	0.17	U	1.0	0.17
1330-20-7	Xylenes, Total	0.65	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-123
460-00-4	4-Bromofluorobenzene	101		76-120
1868-53-7	Dibromofluoromethane (Surr)	104		77-124
2037-26-5	Toluene-d8 (Surr)	95		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-7 Lab Sample ID: 460-254696-10

Matrix: Water Lab File ID: T63057.D

Analysis Method: 8260D Date Collected: 03/15/2022 15:28

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 16:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	16		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.34	J	1.0	0.26
75-35-4	1,1-Dichloroethene	1.7		1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	0.37	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38
106-93-4	1,2-Dibromoethane	0.50	U	1.0	0.50
95-50-1	1,2-Dichlorobenzene	0.21	U	1.0	0.21
107-06-2	1,2-Dichloroethane	0.43	U	1.0	0.43
78-87-5	1,2-Dichloropropane	0.35	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.34	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	0.33	U	1.0	0.33
78-93-3	2-Butanone (MEK)	1.9	U	5.0	1.9
591-78-6	2-Hexanone	1.1	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3
67-64-1	Acetone	4.4	U	5.0	4.4
71-43-2	Benzene	0.20	U	1.0	0.20
75-25-2	Bromoform	0.54	U	1.0	0.54
74-83-9	Bromomethane	0.55	U	1.0	0.55
75-15-0	Carbon disulfide	0.82	U	1.0	0.82
56-23-5	Carbon tetrachloride	0.21	U	1.0	0.21
108-90-7	Chlorobenzene	0.68	J	1.0	0.38
74-97-5	Chlorobromomethane	0.41	U	1.0	0.41
124-48-1	Chlorodibromomethane	0.28	U	1.0	0.28
75-00-3	Chloroethane	0.32	U	1.0	0.32
67-66-3	Chloroform	0.33	U	1.0	0.33
74-87-3	Chloromethane	0.40	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.80	J	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	0.22	U	1.0	0.22
75-27-4	Dichlorobromomethane	0.34	U	1.0	0.34
100-41-4	Ethylbenzene	0.30	U	1.0	0.30
75-09-2	Methylene Chloride	0.32	U	1.0	0.32
100-42-5	Styrene	0.42	U	1.0	0.42
127-18-4	Tetrachloroethene	0.55	J	1.0	0.25
108-88-3	Toluene	0.38	U	1.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: MW-7 Lab Sample ID: 460-254696-10

Matrix: Water Lab File ID: T63057.D

Analysis Method: 8260D Date Collected: 03/15/2022 15:28

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 16:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.24	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	0.22	U	1.0	0.22
79-01-6	Trichloroethene	11		1.0	0.31
75-01-4	Vinyl chloride	0.17	U	1.0	0.17
1330-20-7	Xylenes, Total	0.65	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		75-123
460-00-4	4-Bromofluorobenzene	102		76-120
1868-53-7	Dibromofluoromethane (Surr)	106		77-124
2037-26-5	Toluene-d8 (Surr)	95		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: "non responsive based on revised scope" Job No.: 460-254696-1

SDG No.:

Client Sample ID: EB-01-031522 Lab Sample ID: 460-254696-11

Matrix: Water Lab File ID: T63041.D

Analysis Method: 8260D Date Collected: 03/15/2022 15:57

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 10:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.26	U	1.0	0.26
75-35-4	1,1-Dichloroethene	0.26	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	0.37	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38
106-93-4	1,2-Dibromoethane	0.50	U	1.0	0.50
95-50-1	1,2-Dichlorobenzene	0.21	U	1.0	0.21
107-06-2	1,2-Dichloroethane	0.43	U	1.0	0.43
78-87-5	1,2-Dichloropropane	0.35	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.34	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	0.33	U	1.0	0.33
78-93-3	2-Butanone (MEK)	1.9	U	5.0	1.9
591-78-6	2-Hexanone	1.1	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3
67-64-1	Acetone	4.4	U	5.0	4.4
71-43-2	Benzene	0.20	U	1.0	0.20
75-25-2	Bromoform	0.54	U	1.0	0.54
74-83-9	Bromomethane	0.55	U	1.0	0.55
75-15-0	Carbon disulfide	0.82	U	1.0	0.82
56-23-5	Carbon tetrachloride	0.21	U	1.0	0.21
108-90-7	Chlorobenzene	0.38	U	1.0	0.38
74-97-5	Chlorobromomethane	0.41	U	1.0	0.41
124-48-1	Chlorodibromomethane	0.28	U	1.0	0.28
75-00-3	Chloroethane	0.32	U	1.0	0.32
67-66-3	Chloroform	0.33	U	1.0	0.33
74-87-3	Chloromethane	0.40	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.22	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	0.22	U	1.0	0.22
75-27-4	Dichlorobromomethane	0.34	U	1.0	0.34
100-41-4	Ethylbenzene	0.30	U	1.0	0.30
75-09-2	Methylene Chloride	0.32	U	1.0	0.32
100-42-5	Styrene	0.42	U	1.0	0.42
127-18-4	Tetrachloroethene	0.25	U	1.0	0.25
108-88-3	Toluene	0.38	U	1.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: EB-01-031522 Lab Sample ID: 460-254696-11

Matrix: Water Lab File ID: T63041.D

Analysis Method: 8260D Date Collected: 03/15/2022 15:57

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 10:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.24	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	0.22	U	1.0	0.22
79-01-6	Trichloroethene	0.31	U	1.0	0.31
75-01-4	Vinyl chloride	0.17	U	1.0	0.17
1330-20-7	Xylenes, Total	0.65	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		75-123
460-00-4	4-Bromofluorobenzene	107		76-120
1868-53-7	Dibromofluoromethane (Surr)	106		77-124
2037-26-5	Toluene-d8 (Surr)	97		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: "non responsive based on revised scope" Job No.: 460-254696-1

SDG No.:

Client Sample ID: TB-01-031422 Lab Sample ID: 460-254696-12

Matrix: Water Lab File ID: T63042.D

Analysis Method: 8260D Date Collected: 03/14/2022 00:00

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 10:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.26	U	1.0	0.26
75-35-4	1,1-Dichloroethene	0.26	U	1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	0.37	U	1.0	0.37
96-12-8	1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38
106-93-4	1,2-Dibromoethane	0.50	U	1.0	0.50
95-50-1	1,2-Dichlorobenzene	0.21	U	1.0	0.21
107-06-2	1,2-Dichloroethane	0.43	U	1.0	0.43
78-87-5	1,2-Dichloropropane	0.35	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.34	U	1.0	0.34
106-46-7	1,4-Dichlorobenzene	0.33	U	1.0	0.33
78-93-3	2-Butanone (MEK)	1.9	U	5.0	1.9
591-78-6	2-Hexanone	1.1	U	5.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3
67-64-1	Acetone	4.4	U	5.0	4.4
71-43-2	Benzene	0.20	U	1.0	0.20
75-25-2	Bromoform	0.54	U	1.0	0.54
74-83-9	Bromomethane	0.55	U	1.0	0.55
75-15-0	Carbon disulfide	0.82	U	1.0	0.82
56-23-5	Carbon tetrachloride	0.21	U	1.0	0.21
108-90-7	Chlorobenzene	0.38	U	1.0	0.38
74-97-5	Chlorobromomethane	0.41	U	1.0	0.41
124-48-1	Chlorodibromomethane	0.28	U	1.0	0.28
75-00-3	Chloroethane	0.32	U	1.0	0.32
67-66-3	Chloroform	0.33	U	1.0	0.33
74-87-3	Chloromethane	0.40	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	0.22	U	1.0	0.22
10061-01-5	cis-1,3-Dichloropropene	0.22	U	1.0	0.22
75-27-4	Dichlorobromomethane	0.34	U	1.0	0.34
100-41-4	Ethylbenzene	0.30	U	1.0	0.30
75-09-2	Methylene Chloride	0.32	U	1.0	0.32
100-42-5	Styrene	0.42	U	1.0	0.42
127-18-4	Tetrachloroethene	0.25	U	1.0	0.25
108-88-3	Toluene	0.38	U	1.0	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: [redacted] Job No.: 460-254696-1

SDG No.:

Client Sample ID: TB-01-031422 Lab Sample ID: 460-254696-12

Matrix: Water Lab File ID: T63042.D

Analysis Method: 8260D Date Collected: 03/14/2022 00:00

Sample wt/vol: 5(mL) Date Analyzed: 03/21/2022 10:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 834599 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.24	U	1.0	0.24
10061-02-6	trans-1,3-Dichloropropene	0.22	U	1.0	0.22
79-01-6	Trichloroethene	0.31	U	1.0	0.31
75-01-4	Vinyl chloride	0.17	U	1.0	0.17
1330-20-7	Xylenes, Total	0.65	U	2.0	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		75-123
460-00-4	4-Bromofluorobenzene	105		76-120
1868-53-7	Dibromofluoromethane (Surr)	112		77-124
2037-26-5	Toluene-d8 (Surr)	96		80-120

HOLDING TIMES
Volatiles

Site Name: Kessler **Volatiles**

Lab ID	Sample ID	Matrix	Analyte	Sample Date	Date Analyzed	Analysis Hold Time (days)	Days to Analysis	Qualify
460-254696-02	RW-1	Groundwater	Volatiles	3/14/2022	3/21/2022	14	7.0	
460-254696-03	MW-8	Groundwater	Volatiles	3/14/2022	3/21/2022	14	7.0	
460-254696-04	MW-2	Groundwater	Volatiles	3/15/2022	3/21/2022	14	6.0	
460-254696-05	MW-2D	Groundwater	Volatiles	3/15/2022	3/21/2022	14	6.0	
460-254696-06	MW-3	Groundwater	Volatiles	3/15/2022	3/21/2022	14	6.0	
460-254696-07	MW-4	Groundwater	Volatiles	3/15/2022	3/21/2022	14	6.0	
460-254696-08	MW-5A	Groundwater	Volatiles	3/15/2022	3/21/2022	14	6.0	
460-254696-09	MW-6	Groundwater	Volatiles	3/15/2022	3/21/2022	14	6.0	
460-254696-10	MW-7	Groundwater	Volatiles	3/15/2022	3/21/2022	14	6.0	
460-254696-11	EB-01-031522	Aqueous	Volatiles	3/15/2022	3/21/2022	14	6.0	
460-254696-12	TB-01-031422	Aqueous	Volatiles	3/14/2022	3/21/2022	14	7.0	

460-254696_Field Duplicate
All Water

Site Name: Kessler
Project Number: 2000-770
Laboratory: [redacted]
Matrix: Groundwater

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
MW-2D	Chloroform	ug/L	0.33	J	1		
MW-2	Chloroform	ug/L	0.37	J	1	0.04	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify
MW-2D	Trichloroethene	ug/L	0.34	J	1		
MW-2	Trichloroethene	ug/L	0.47	J	1	0.13	no

Duplicate Criteria: Aqueous matrices <30 % RPD or < ± 1*RL, Soil/Solid matrices <40 %RPD or < ± 2*RL.

Yes - Denotes %RPD or difference outside criteria.

NA - Duplicate relative percent difference or difference cannot be calculated.

U / ND - Not detected.

METALS DATA VALIDATION SUMMARY

Site Name: Kessler
Project Number: 2000-770
Sampling Date(s): 3/14/2022

Laboratory: "non responsive based on revised scope"
Case/Order No.: 460-254696

Compound List: Manganese

Method: 6020B

The following table indicates the data validation criteria examined, any problems identified, and the QA action applied.

Data Validation Criteria:	Accept	FYI	Qualify	Comments
Holding Times	X			
ICP/MS Tuning	X			
Initial Calibrations	X			
Continuing Calibrations	X			
Blank Analysis	X			
Field Duplicate Analysis				NA
Matrix Spike Analysis (MS/MSD)		X		MW-8
Laboratory Control Sample Analysis (LCS)	X			
Laboratory Duplicate Analysis	X			MW-8
ICP/ICP-MS Internal Standard	X			
CRDL Standard				NA
Serial Dilution	X			
Interference Check Sample Recoveries	X			
Overall Assessment of Data	X			
Other:				

General Comments: Cooler Temp: 1.6°C

Accept - No qualification required.
FYI - For your information only, no qualification necessary.
Qualify - Qualify as rejected, estimated or biased.
NR - Not Reviewed
NA - Not Applicable

QA Scientist "non responsive based on revised scope"

Date 04/05/2022

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1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: RW-1 | Lab Sample ID: 460-254696-2

Lab Name: [redacted] | Job No.: 460-254696-1

SDG ID.:

Matrix: Water | Date Sampled: 03/14/2022 10:15

Reporting Basis: WET | Date Received: 03/16/2022 18:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-96-5	Manganese	760	8.0	1.5	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-8 | Lab Sample ID: 460-254696-3

Lab Name: [redacted] | Job No.: 460-254696-1

SDG ID.:

Matrix: Water | Date Sampled: 03/14/2022 10:30

Reporting Basis: WET | Date Received: 03/16/2022 18:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-96-5	Manganese	1230	8.0	1.5	ug/L			1	6020B

Site Name: **Kessler** **Metals**

Lab ID	Sample ID	Matrix	Analyte	Sample Date	Analyzed Date	Analysis Hold Time (days)	Days to Analysis	Qualify
460-254696-02	RW-1	Groundwater	Manganese	3/14/2022	3/22/2022	180	6.0	
460-254696-03	MW-8	Groundwater	Manganese	3/14/2022	3/22/2022	180	8.0	

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: MW-8 MS | Lab ID: 460-254696-3 MS

Lab Name: "non responsive based on revised scope" | Job No.: 460-254696-1

SDG No.:

Matrix: Water | Concentration Units: ug/L

% Solids:

Analyte	SSR C		Sample Result (SR) C		Spike Added (SA)	%R	Control Limit %R	Q	Method
Manganese	1545		1230		250	128	75-125	4	6020B

SSR = Spiked Sample Result
FYI MS Recovery outside of the laboratory control limits, associated batched samples include RW-1 and MW-8. Parent sample MW-8. Sample concentrations > 4x spike concentration.

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

"non responsive to

0

03/24/2022

CONVENTIONALS DATA VALIDATION SUMMARY

Site Name: Kessler
Project Number: 2000-770
Sampling Date(s): 3/14/2022

Laboratory: [redacted]
Case/Order No.: 460-254696

Compound List: Total Suspended Solids

Method: SM 2540D

The following table indicates the data validation criteria examined, any problems identified, and the QA action applied.

Data Validation Criteria:	Accept	FYI	Qualify	Comments
Holding Times	X			
Initial Calibrations				NA
Continuing Calibrations				NA
Blank Analysis	X			
Field Duplicate Analysis				NA
Matrix Spike Analysis (MS/MSD)				NA
Laboratory Control Sample Analysis (LCS)	X			
Laboratory Duplicate Analysis	X			MW-8
Overall Assessment of Data	X			
Other:				

General Comments: Cooler Temp: 1.6°C

Accept - No qualification required.
FYI - For your information only, no qualification necessary.
Qualify - Qualify as rejected, estimated or biased.
NR - Not Reviewed
NA - Not Applicable

QA Scientist [redacted]

Date 4/5/2022

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1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: RW-1 | Lab Sample ID: 460-254696-2

Lab Name: [redacted] | Job No.: 460-254696-1

SDG ID.:

Matrix: Water | Date Sampled: 03/14/2022 10:15

Reporting Basis: WET | Date Received: 03/16/2022 18:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Suspended Solids	2.5	2.5	2.5	mg/L	U		1	SM 2540D

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-8 | Lab Sample ID: 460-254696-3

Lab Name: "non responsive based on revised scope" | Job No.: 460-254696-1

SDG ID.:

Matrix: Water | Date Sampled: 03/14/2022 10:30

Reporting Basis: WET | Date Received: 03/16/2022 18:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Suspended Solids	2.5	2.5	2.5	mg/L	U		1	SM 2540D

"non responsiv

HOLDING TIMES
WC

Site Name: **Kessler** **Wet Chemistry**

Lab ID	Sample ID	Matrix	Analyte	Sample Date	Date Analyzed	Analysis Hold Time (days)	Days to Analysis	Qualify
460-254696-02	RW-1	Groundwater	Total Suspended Solids	3/14/2022	3/20/2022	7	6	
460-254696-03	MW-8	Groundwater	Total Suspended Solids	3/14/2022	3/21/2022	7	7	

DATA SUMMARY TABLES

KESSLER
1st Half 2022 Groundwater, 3/14-15/2022
[redacted] # 460-254696, Project# 2000-770

Sample Location		RW-1			MW-8			MW-2			MW-2D			MW-3			MW-4			MW-5A			MW-6			MW-7			EB-01-031522			TB-01-031422		
Lab ID		460-254696-02			460-254696-03			460-254696-04			460-254696-05			460-254696-06			460-254696-07			460-254696-08			460-254696-09			460-254696-10			460-254696-11			460-254696-12		
Sample Date		3/14/2022			3/14/2022			3/15/2022			3/15/2022			3/15/2022			3/15/2022			3/15/2022			3/15/2022			3/15/2022			3/15/2022			3/14/2022		
Matrix		Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Groundwater			Aqueous			Aqueous		
Remarks											FD of MW-2																		Equipment Blank			Trip Blank		
Parameter	**Units**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Volatiles																																		
1,1,1-Trichloroethane	ug/L	19		1	17		1		U	1		U	1		U	1		U	1	4 3		1		U	1	16		1		U	1		U	1
1,1,2,2-Tetrachloroethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,1,2-Trichloroethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,1-Dichloroethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1	0 29	J	1		U	1	0 34	J	1		U	1		U	1
1,1-Dichloroethene	ug/L	3 2		1	2 7		1		U	1		U	1		U	1		U	1	0 49	J	1		U	1	1 7		1		U	1		U	1
1,2,4-Trichlorobenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,2-Dibromo-3-Chloropropane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,2-Dibromoethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,2-Dichlorobenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,2-Dichloroethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,2-Dichloropropane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,3-Dichlorobenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
1,4-Dichlorobenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
2-Butanone (MEK)	ug/L		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5
2-Hexanone	ug/L		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5
4-Methyl-2-pentanone (MIBK)	ug/L		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5
Acetone	ug/L		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5		U	5
Benzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Bromoform	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Bromomethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Carbon disulfide	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Carbon tetrachloride	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Chlorobenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1	0 73	J	1		U	1	0 68	J	1		U	1		U	1
Chlorobromomethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Chlorodibromomethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Chloroethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Chloroform	ug/L		U	1		U	1	0 37	J	1	0 33	J	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Chloromethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
cis-1,2-Dichloroethene	ug/L	0 66	J	1	0 74	J	1		U	1		U	1		U	1		U	1	0 86	J	1	0 39	J	1	0 8	J	1		U	1		U	1
cis-1,3-Dichloropropene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Dichlorobromomethane	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Ethylbenzene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Methylene Chloride	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Styrene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Tetrachloroethene	ug/L	0 88	J	1	0 79	J	1		U	1		U	1		U	1		U	1		U	1		U	1	0 55	J	1		U	1		U	1
Toluene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
trans-1,2-Dichloroethene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
trans-1,3-Dichloropropene	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Trichloroethene	ug/L	34		1	28		1	0 47	J	1	0 34	J	1	0 62	J	1	0 71	J	1	3 1		1		U	1	11		1		U	1		U	1
Vinyl chloride	ug/L		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1		U	1
Xylenes, Total	ug/L		U	2		U	2		U	2		U	2		U	2		U	2		U	2		U	2		U	2		U	2		U	2
Total Metals																																		
Manganese	ug/L	760		8	1230		8		NA			NA			NA			NA			NA			NA			NA			NA			NA		
Conventionals																																		
Total Suspended Solids	mg/L		U	2 5		U	2 5		NA			NA			NA			NA			NA			NA			NA			NA			NA		

QA Scientist [redacted]

Date 04/06/2022